

## Blakely M. Adair Receives 2001 SBRP Karen Wetterhahn Memorial Award



The Superfund Basic Research Program (SBRP) is pleased to announce that Blakely M. Adair, a Ph.D. candidate at Texas Tech University, is the recipient of the 2001 SBRP Karen Wetterhahn Memorial Award.

This award is given each year to pay tribute to the life and scientific accomplishments of Karen E. Wetterhahn, former director of the SBRP program at Dartmouth College. Wetterhahn died 8 June 1997 as the result of dimethylmercury poisoning caused by the accidental spill of a few drops of the chemical as she was handling it. Wetterhahn was an established authority on the effects of heavy metals on biological systems as well as a dedicated teacher and mentor.

The SBRP honors Wetterhahn's legacy through the annual recognition of an outstanding student who studies metals and who best demonstrates the qualities of scientific excellence exhibited by Wetterhahn. Adair earned this year's award as the result of her research excellence, her contributions in environmental metals research, and her commitment to mentoring and assisting other students.

Adair's research focuses on developing and applying analytical chemistry and modeling techniques for use in hazardous waste site assessment. For her master's research thesis, she developed a sensitive method for total mercury analysis and applied it to kidney and food samples collected from juvenile warblers inhabiting nest boxes on Superfund sites. The study demonstrated that warblers accumulated renal mercury from their diet at concentrations that correlated with soil and sediment levels.

For her doctoral research, Adair is studying metal contaminant mixtures found on the Anaconda Smelter Superfund site in Montana. She is examining metal uptake, distribution, and toxicity in small birds. Adair is collecting and characterizing the metal concentrations in food samples from nestling birds. She is also collecting nestling tissue samples and comparing food metal concentrations and tissue metal concentrations. Her findings will be used in conjunction with other data to prioritize remediation processes on the Anaconda site.

In addition, Adair is assessing the physiologic effects of metal exposures using porphyrin and ALAD biomarkers. Results from correlations with five metals found on the Anaconda site and tissue porphyrins suggest a positive correlation between lead and copper concentrations and increasing porphyrin concentrations in kidneys.

The NIEHS congratulates Adair on her research accomplishments and wishes her continued success in her scientific career.